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Abstract:

Hydraulic Piston and Process for its Surface Treatment

The present invention relates to a hydraulic piston and a process for its surface treatment in order to improve above all the wear resistance and corrosion resistance at the surface of the piston. As a favorable manufacturing process for the surface treatment of an above-mentioned hydraulic piston, a multistage process is disclosed which arranges a nitrocarburization with a subsequent oxidation and a following mechanical solidification of the oxidized surface for the piston. As a result, several superposed layers - layer of oxide, connecting layer, diffusion layer - develop at the piston surface which exhibit the desired qualities.